

# **ABSTRACT**

[110] Disclosed herein is a thin film deposition apparatus having a reaction chamber for forming a thin film on a plurality of substrates rested on a susceptor. The apparatus comprises: a  
5 gas supply means for supplying a plurality of gases to the inside of the reaction chamber from the outside, the gases including a reaction gas; a gas distribution means for distributing and spraying the gases supplied from the gas supply means so as to conform to the purpose of a process; a gas retaining means having  
10 a plurality of reaction cells for partitionally accommodating and retaining the respective gases distributed from the gas distribution means; a rotation driving means for rotating the gas retaining means such that the gases retained in the respective reaction cells are exposed to the substrates in sequence; and a  
15 gas exhaust means for pumping the gases retained by the gas retaining means to the outside of the reaction chamber.